

Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, claim 10 has been amended to change “containing” to -- consisting essentially of--. The significance of this limitation will be discussed below. A similar change has been made in claim 14.

Claim 15 has been amended to place it in more conventional form according to U.S. practice, by reciting an “adding” step. Amended claim 15 also recites that the alloy resulting from the method is one “consisting essentially of” the recited components.

The patentability of the present invention over the disclosure of the reference relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claim 15 under 35 U.S.C. §102(b) as being anticipated by Burleigh et al., as well as the rejection of claims 10-17 under 35 U.S.C. §103(a) as being unpatentable over this reference, and the rejection of claims 16 and 17 under 35 U.S.C. §103(a) as being unpatentable over this reference, are respectfully traversed.

The significance of the limitation limiting the alloy to one consisting essentially of the recited components is that the claims thus exclude the alloy of the Burleigh et al. reference, which contains Li as an essential element, more specifically in an amount of about 7-12%.

The expression “consisting essentially of” excludes from the claimed alloy any component which would materially affect the basic nature or characteristics of the alloy.

In this regard, Burleigh et al. discloses a lithium alloy which normally is wrought and artificially aged, contrary to the alloy according to the present invention which is suitable for casting or die casting products and which is a Mg-Al-Si based alloy.

The main purpose of the Si according to the present invention is to increase the sagging resistance of the alloy. Si is included in the alloy to maintain the phase equilibrium of the alloying elements which restricts the solubility of Mn, RE and Fe and which makes the addition of RE quite specific for the alloy according to the present invention. In particular the content of Si specified in claim 1 of the present invention is important in magnesium alloys with low content of Al when the corrosion resistance is at the lowest. The sagging resistance is optimal with an Al content of between

2-2.5 %. With such low Al-content the sagging resistance was not sufficient for some applications of the alloy, but with the specified RE modification the required improvement was obtained.

Since the present invention is directed to an Al-Mg-Si alloy, while Burleigh et al. deals with a Mg-Li alloy and the balancing of the alloying elements are different as explained above, the present invention is both novel and patentable over Burleigh et al.

It is therefore apparent that if lithium were added to the alloy of the present invention it would materially affect the basic nature or characteristics of the alloy.

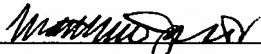
For these reasons, Applicants take the position that the presently claimed invention is clearly patentable over the Burleigh et al. reference.

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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